

Material Safety Data Sheet

according to ANSI Z400.1- 2004 and 29 CFR 1910.1226



OFF!® FAMILYCARE INSECT REPELLENT I - SMOOTH & DRY

Version 2.0

Print Date 03/04/2011

Revision Date 01/13/2011

MSDS Number 350000004941
SITE_FORM Number
30000000000000004248.002

1. PRODUCT AND COMPANY IDENTIFICATION

Product information

Trade name : OFF!® FAMILYCARE INSECT REPELLENT I - SMOOTH & DRY

Use of the Substance/Mixture : Insect Repellent
Company : S.C. Johnson & Son, Inc.
1525 Howe Street
Racine WI 53403-2236

Emergency telephone number : 24 Hour Transport & Medical Emergency Phone (866) 231-5406
24 Hour International Emergency Phone (952) 852-4647

2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance / Odor : clear / aerosol / pleasant

Immediate Concerns

: Warning
FLAMMABLE:
CAUSES EYE IRRITATION.
Keep away from heat, sparks and flame.
Harmful if swallowed.
Contents under pressure.
Do not puncture or incinerate.
Do not store at temperatures above 120 Deg. F (50 Deg C), as container may burst.
Avoid contact with eyes and lips.

Potential Health Effects

Exposure routes : Eye, Skin, Inhalation, Ingestion.

Eyes : Causes:
Moderate eye irritation

Skin : May cause skin reactions in rare cases.

Inhalation : May cause nose, throat, and lung irritation.
Inhalation may cause central nervous system effects.

Ingestion : Causes headache, drowsiness or other effects to the central nervous system.

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Harmful if swallowed.

Aggravated Medical Condition : Do not apply to cuts or irritated skin. Individuals with chronic respiratory disorders such as asthma, chronic bronchitis, emphysema, etc. may be more susceptible to irritating effects.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous chemicals present at or above reportable levels as defined by OSHA 29 CFR 1910.1200 or the Canadian Controlled Products Regulations are listed in this table:

Chemical Name	CAS-No.	Weight percent
Ethyl alcohol	64-17-5	10.00 - 30.00
Butane	106-97-8	10.00 - 30.00
N,N-Diethyl-m-toluamide	134-62-3	10.00 - 30.00
Propane	74-98-6	10.00 - 30.00
Isobutane	75-28-5	7.00 - 13.00
Corn starch	9005-25-8	7.00 - 13.00
Magnesium carbonate	546-93-0	1.00 - 5.00

For additional information on product ingredients, see www.whatsinsidescjohnson.com.

4. FIRST AID MEASURES

Eye contact : Remove contact lenses. Flush immediately with plenty of water for at least 15 to 20 minutes. Get medical attention if irritation develops and persists.

Skin contact : Wash off immediately with plenty of water. Get medical attention if irritation develops and persists. If you suspect a reaction to this product, discontinue use and remove contaminated clothing.

Inhalation : Remove to fresh air. If breathing is affected, get medical attention.

Ingestion : If swallowed, DO NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing : Use water spray, alcohol-resistant foam, dry chemical or

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media	carbon dioxide.
Specific hazards during fire fighting	: Flammable liquid. Vapors are heavier than air and may travel to a source of ignition and flash back. Liquid run-off to sewers may create fire/explosion hazard. Aerosol Product - Containers may rocket or explode in heat of fire. Do not allow run-off from fire fighting to enter drains or water courses. Burns with colourless flame.
Further information	: Fight fire from maximum distance or protected area. Cool and use caution when approaching or handling fire-exposed containers. For large quantities of flammable liquids, consider containment to prevent the spread of fire. Wear full protective clothing and positive pressure self-contained breathing apparatus. In case of fire and/or explosion do not breathe fumes.
Flash point	: < -7 °C < 19.4 °F Method: Tag Closed Cup (TCC) Note: Propellant
Lower explosion limit	: Note: no data available
Upper explosion limit	: Note: no data available
NFPA Classification	: NFPA Level 2 Aerosol

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	: Remove all sources of ignition. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. Wear personal protective equipment.
Environmental precautions	: Do not flush into surface water or sanitary sewer system. Use appropriate containment to avoid environmental contamination. Outside of normal use, avoid release to the environment.
Methods for cleaning up	: If damage occurs to aerosol can: Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13). Use only non-sparking equipment. Dike large spills. Clean residue from spill site.

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7. HANDLING AND STORAGE

Handling

Advice on safe handling : Do not puncture or incinerate.
Avoid contact with eyes and lips.
Avoid breathing vapors, mist or gas.
For personal protection see section 8.
Do not spray toward face.
Do not use in areas without adequate ventilation.
Use only as directed.
KEEP OUT OF REACH OF CHILDREN AND PETS.
Smoking, eating and drinking should be prohibited in the application area.

Advice on protection against fire and explosion : Keep away from heat and sources of ignition.
Take measures to prevent the build up of electrostatic charge.

Storage

Requirements for storage areas and containers : Keep away from food, drink and animal feedingstuffs.
Do not store at temperatures above 120 Deg. F (50 Deg C), as container may burst.
Keep in a dry, cool and well-ventilated place.

Other data : Stable under normal conditions.

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

Components	CAS-No.	mg/m3	ppm	Non-standard units	Basis
Ethyl alcohol	64-17-5	1,900 mg/m3	1,000 ppm	-	OSHA TWA
Ethyl alcohol	64-17-5	-	1,000 ppm	-	ACGIH STEL
Butane	106-97-8	-	1,000 ppm	-	ACGIH TWA
Propane	74-98-6	1,800 mg/m3	1,000 ppm	-	OSHA TWA
Propane	74-98-6	-	1,000 ppm	-	ACGIH TWA
Isobutane	75-28-5	-	1,000 ppm	-	ACGIH TWA
Corn starch	9005-25-8	5 mg/m3	-	-	OSHA TWA
Corn starch	9005-25-8	15 mg/m3	-	-	OSHA TWA
Corn starch	9005-25-8	10 mg/m3	-	-	ACGIH TWA
Magnesium carbonate	546-93-0	5 mg/m3	-	-	OSHA TWA
Magnesium carbonate	546-93-0	15 mg/m3	-	-	OSHA TWA

Personal protective equipment

Respiratory protection

Industrial setting : Use only with adequate ventilation.
Do not spray in enclosed areas.

Household setting : Use only with adequate ventilation.

Hand protection : No special requirements.

Eye protection

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Industrial setting : Safety glasses with side-shields

Household setting : Avoid contact with eyes.

Skin and body protection : No special requirements.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly after handling. Smoking, eating and drinking should be prohibited in the application area.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form : aerosol

Color : clear

Odor : pleasant

pH : 9.9

Melting point : not applicable

Boiling point : not applicable

Freezing point : no data available

Flash point : < -7 °C
< 19.4 °F
Method: Tag Closed Cup (TCC)
Propellant

Evaporation rate : no data available

Flammability (solid, gas) : Sustains combustion

Autoignition temperature : no data available

Lower explosion limit : no data available

Upper explosion limit : no data available

Vapour pressure : 55 psi
at 70 °F

Density : 0.77 g/ml

Water solubility : dispersible

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Partition coefficient: n-octanol/water : no data available

Viscosity, dynamic : not applicable

Viscosity, kinematic : not applicable

Volatile Organic Compounds (California Air Resource Board – CARB) : 66.8 % - does not include any applicable regulatory exemptions

Total VOC (wt. %)

10. STABILITY AND REACTIVITY

Conditions to avoid : Heat, flames and sparks.

Materials to avoid : Strong oxidizing agents
Strong acids

Hazardous decomposition products : Thermal decomposition can lead to release of irritating gases and vapours.

Hazardous reactions : Stable under recommended storage conditions.

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity : LD50
Calculated
3,735 mg/kg

Acute inhalation toxicity : LC50
Calculated
> 2.79 mg/l

Acute dermal toxicity : LD50
estimated
> 2,000 mg/kg

Chronic effects

Carcinogenicity : no data available

Mutagenicity : no data available

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Reproductive effects : no data available

Teratogenicity : no data available

Sensitisation : no data available

12. ECOLOGICAL INFORMATION

Ecotoxicity effects : no data available

13. DISPOSAL CONSIDERATIONS

PESTICIDAL WASTE:
Observe all applicable Federal, Provincial and State regulations and Local/Municipal ordinances regarding disposal.
Consumer may discard empty container in trash, or recycle where facilities exist.

RCRA waste class : D001 (Ignitable Waste)

14. TRANSPORT INFORMATION

Land transport

▪ **U.S. DOT and Canadian TDG Surface Transportation:**

Proper shipping name UN 1950 AEROSOLS, Flammable, 2.1
Class: 2.1
UN number 1950
Packaging group: None.
Note: SC Johnson ships this product as Consumer Commodity ORM-D (non-bulk packages)

Sea transport

▪ **IMDG:**

Proper shipping name UN 1950 AEROSOLS, Flammable, 2.1
Class: 2
UN number: 1950
Packaging group: None.
EmS: F-D, S-U
Note: Limited quantities derogation may be applicable to this product, please check transport documents.

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Air transport

- ICAO/IATA:
Proper shipping name UN 1950 AEROSOLS, Flammable, 2.1
- Class: 2.1
- UN/ID No.: UN 1950
- Packaging group: None.
- Note: SC Johnson typically does not ship products via air, therefore it has not been determined if the product container meets current IATA/ICAO package criteria. Refer to IATA/ICAO Dangerous Goods Regulations for detailed instructions when shipping this item by air.

15. REGULATORY INFORMATION

- Notification status : All ingredients of this product are listed or are excluded from listing on the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.
 - Notification status : All ingredients of this product are listed or are excluded from listing on the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.
 - California Prop. 65 : This product is not subject to the reporting requirements under California's Proposition 65.
 - Canada Regulations : This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.
- Registration # / Agency**
4822-543/US/EPA
28648/PMRA

16. OTHER INFORMATION

HMIS Ratings

Health	2
Flammability	4
Reactivity	0

NFPA Ratings

Health	2
Fire	4
Reactivity	0

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Special

Further information

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